April 6, 2007 Vol. 46, No. 7

Spaceport News

John F. Kennedy Space Center - America's gateway to the universe

http://www.nasa.gov/centers/kennedy/news/snews/spnews_toc.html

NASA's AIM on schedule for late April Vandenberg launch

NASA's AIM, or Aeronomy of Ice in the Mesosphere, is scheduled to launch April 25 from Vandenberg Air Force Base in California. Since the AIM spacecraft arrived at Vandenberg, all prelaunch processing has gone well, including a partial deployment of the solar array and a successful illumination test.

Mating of the AIM spacecraft to the Pegasus XL rocket was scheduled for April 3. Another flight simulation will be conducted next week after AIM is mechanically mated and electrically integrated onto the Pegasus rocket.

AIM is a two-year mission to study polar mesospheric clouds, or PMCs — the Earth's highest clouds, which form an icy membrane 50 miles above the surface at the edge of space. These clouds, which are visible from the ground with the naked eye, form in the spring and summer at high latitudes and have been seen for more than a century, reflecting the sun's light in the twilight sky.

While one and the same phenomenon, they are called noctilucent clouds, or NLCs, when observed from the ground at twilight and PMCs when viewed from space platforms with instruments that can sense their presence at any time of the night or day.

The primary goal of the AIM mission is to explain why PMCs form in the first place and learn what is causing the mysterious changes in their behavior.

The AIM satellite, which weighs 430 pounds, carries three state-of-the-art instruments: Cloud Imaging and Particle Size, the Solar Occultation for Ice Experiment and the Cosmic Dust Experiment.

INSIDE A clean-room tent at North Vandenberg Air Force Base, technicians prepare for the solar array deployment on the AIM spacecraft.

New launch date for STS-117 mission due next week

In high bay No. 1 of the Vehicle Assembly Building, technicians continue to repair hail damage to the STS-117 external fuel tank, ET-124. Special scaffolding and access platforms have been erected to allow access to the tank and orbiter for inspections and repairs.

Foam repairs on the liquid hydrogen tank, which is located on the bottom of the external tank, are complete. Repairs to Atlantis' orbiter thermal protection system tiles are complete, and technicians finished non-destructive evaluations of the vehicle's reinforced carbon-carbon panels on the left wing leading edge using thermography equipment. No damage was detected.

Shuttle program managers met to assess the damage and repair status, and decided to continue work on repairing ET-124. Managers are scheduled to meet again in early April to decide whether to use ET-124 or substitute a new tank, ET-117, which is scheduled to arrive at KSC early this month.

During the 11-day mission, the six-member crew of STS-117 will install a new truss segment, retract a set of solar arrays and unfold a new set on the starboard side of the station. Lessons learned from two previous missions will provide the astronauts with new techniques and tools to perform their duties.

Atlantis Commander Rick Sturckow, Pilot Lee Archambault and Mission Specialists Jim Reilly, Patrick Forrester, Steven Swanson and John "Danny" Olivas continue training at Johnson Space Center as they await a new launch date.

IN HIGH BAY 1 inside the Vehicle Assembly Building, technicians begin to carefully sand away the dye that has been applied to the external tank to help expose cracks or compression dents.

STS-120 crew in 'Harmony' for August mission

Mission STS-120, tentatively scheduled for August, will deliver the Node 2 "Harmony" connecting module to the International Space Station. Crew members recently traveled to Kennedy Space Center to familiarize themselves with the module and the equipment they will use during the mission.

MISSION STS-120 crew members familiarize themselves with equipment inside the Space Station Processing Facility during a visit to Kennedy Space Center. Standing from left are Mission Specialists Stephanie Wilson, Paolo Nespoli (with the European Space Agency), Scott Parazynski and Commander Pam Melroy. In the foreground at left is Mission Specialist Daniel Tani. Other crew members include Pilot George Zamka and Mission Specialists Douglas Wheelock and Clayton Anderson.

MISSION STS-120 crew members inspect the Node 2 Harmony module. From left are Mission Specialist Scott Parazynski, Commander Pam Melroy and Mission Specialist Stephanie Wilson.

STS-120 MISSION Specialist Daniel Tani works with equipment inside the Space Station Processing Facility.

April NASA employees of the month

The April NASA employees of the month, from left, include Tom Moss, Applied Technology; Ralph Mikulas, Launch Services Program; Gary Woods, Engineering Directorate; Amber Allen, Chief Financial Office; Christine DuQuesne, Center Operations; Kimberly Knight, Chief Counsel Office; Catherine Parker, Office of the Chief Engineer; Lesley Janosik, Launch Vehicle Processing; and Mike Vinje, Constellation Project Office. Not pictured is Kari Heminger, Cape Canaveral Spaceport Management Office; Paul Schwindt, Engineering Directorate; Steve Ernest, Safety and Mission Assurance; and Ricardo Rodriguez, International Space Station and Spacecraft Processing.

Mango returning as deputy director of Launch Vehicle Processing

Kennedy Space Center Director Bill Parsons recently announced the appointment of Edward Mango to the position of deputy director of the Launch Vehicle Processing Directorate at Kennedy Space Center beginning May 7.

In his new job, Mango will support the director in providing leadership and direction to ensure safe processing and integration of spaceflight hardware. He will also support infrastructure and all aspects of ground operations.

Mango is currently assigned to the Johnson Space Center as the deputy manager of the Orbiter Project Office, where he is responsible for directing the design, development, production and supportability of the space shuttle orbiter fleet.

In this position, he directed the return-to-flight effort to design and implement hundreds of modifications, managing more than 2,500 NASA and contractor personnel in the $750-million-a-year effort.

"In all, Mr. Mango's highly successful performance in a variety of assignments and his in-depth experience at JSC and KSC have provided both the background and the track record to make him an ideal choice for this position," Parsons said.

After serving in the U.S. Air Force, Mango joined NASA at KSC in 1986 and held progressively more responsible leadership positions. These included serving as lead project engineer for the external tank and solid rocket motors; lead project engineer for Atlantis during the Space Shuttle-Mir Program; shuttle project engineer for the Shuttle Launch Team; and in 2001, shuttle launch manager.

During the Space Shuttle Columbia tragedy, he served as the KSC recovery director for the Columbia debris recovery effort in East Texas and as the technical assistant to the Space Shuttle Program manager. He was assigned to JSC in 2003.

THIS JULY 2005 photograph shows Ed Mango, then the Johnson Space Center deputy manager of the orbiter project office, discussing issues related to mission STS-114. Mango will be the new deputy director of Launch Vehicle Processing beginning next month.

Mango earned his Bachelor of Science in aerospace engineering in 1981 from Parks College of Saint Louis University and a Master of Science in engineering from the University of Central Florida.

Logistics engineer proud to receive employee recognition

By Linda Herridge
Staff Writer

Lesley Janosik, a NASA logistics engineer in the Launch Vehicle Processing Directorate, traveled a long road to get to Kennedy Space Center. Originally from a small town near Pittsburgh, Janosik spent 14 years as a materials research engineer at NASA's Glenn Research Center in Ohio before heading to the Space Coast in 2005.

After settling into her new position, Janosik said leaving an aeronautics research environment to be part of the KSC team was a big transition. "It's exciting to be part of the space program," Janosik said. "There really is a great team environment at KSC."

Janosik received the directorate's employee of the month award for April for creating a specialized tool to ensure providing accurate budget analyses and status reports to the Space Shuttle Program project elements, which are supported by NASA Shuttle Logistics.

Janosik works in the Project Integration Branch of the directorate's Logistics Division. She performs resource management and a variety of integration activities to support four technical management representatives/ project elements for the shuttle program at Johnson Space Center and KSC, to ensure the program maintains adequate logistics support.

She works on budget planning, facilitates contract changes and performs surveillance activities associated with the Space Program Operations Contract.

"Most of the projects that we work through our office require utilizing a team approach, with active participation by NASA and United Space Alliance Integrated Logistics," Janosik said.

Current projects include resource planning, budget development and execution for the Orbiter Space Program Operation Contract Logistics efforts through the end of the shuttle program. Janosik is also involved with coordinating and integrating the Logistics Division's efforts for shuttle transition and retirement, and Constellation Project Office support.

She is currently working with the shuttle program, the Constellation Logistics Office and Center Operations to assess requirements and integrate plans as the shuttle program ends and NASA transitions to the Constellation Program.

Janosik said the key to the transition work is finding a balance between disposition of shuttle program capabilities and assets, while maintaining logistics supportability through the end of the shuttle program.

"(Janosik) is a tremendous asset to our organization and we are grateful that she was open and willing to come to KSC to do very different work than she performed at Glenn," said Debbie Bayline, project integration branch chief in the Logistics Division.

Janosik earned a Bachelor of Science degree in engineering science and mechanics from Penn State University in 1990, and a Master of Science in engineering mechanics in 1998 while working at Glenn Research Center.

LESLEY JANOSIK of Launch Vehicle Processing was chosen as an employee of the month.

She has published various papers and journal articles on ceramics research and technology spinoff applications. She earned the NASA Software of the Year Award in 1994 and an "R&D 100 Award" in 1995 for research and development in ceramics.

Janosik enjoys reading, mentoring students and traveling.

U.S. Astronaut Hall of Fame set to wel

Michael Coats, Steven Hawley and Jeffrey Hoffman will join such American space heroes as Neil Armstrong, John Glenn and John Young in the U.S. Astronaut Hall of Fame when they are enshrined during a public ceremony at the Kennedy Space Center Visitor Complex on May 5. This is the sixth group of space shuttle astronauts named to the Hall of Fame.

Earlier inductees represent the Mercury, Gemini, Apollo, Skylab and Apollo-Soyuz programs. The addition of these inspiring men — Coats, director of Johnson Space Center; Hawley, who helped deploy the Hubble Space Telescope; and Hoffman, the first astronaut to log 1,000 hours aboard the shuttle — will bring the number of space explorers enshrined in the Hall of Fame to 66.

The inductees were selected by a committee of current Hall of Fame astronauts, former NASA officials and flight directors, historians, journalists and other space authorities in a process administered by the Astronaut Scholarship Foundation. To be eligible, an astronaut must have made his or her first flight at least 17 years before the induction year and must be retired from NASA's astronaut corps at least five years.

Candidates must be U.S. citizens trained by NASA and must have orbited the Earth at least once. In balloting, committee members evaluate not only an individual's flight accomplishments, but also how he or she contributed to the success and future success of the U.S. Space Program in post-flight assignments.

The public is invited to witness heroes honoring heroes at the Hall of Fame Induction Ceremony, which is included as part of admission to the Kennedy Space Center Visitor Complex on May 5.

Special Astronaut Hall of Fame Induction Weekend packages are available and include lunch with an astronaut and a commemorative souvenir. For more information, call 321-449-4444 or visit **www.kennedyspacecenter.com**.

Michael Coats

A Naval aviator, test pilot and veteran of three space shuttle missions, Michael L. Coats has logged more than 5,000 hours of flying time in 28 different aircraft, and more than 400 carrier landings. He served as pilot on his first shuttle flight, the maiden flight of Discovery.

After overcoming the first launch pad abort of the shuttle program, Coats and his STS-41D crewmates deployed a prototype solar array and three satellites. His second flight was also his first command, again aboard Discovery on mission STS-29.

On that mission, the third after the tragic loss of Challenger in 1986, Coats' crew deployed a Tracking and Data Relay Satellite and performed a space station "heat pipe" radiator experiment. After nearly five days and 3,000 photographs taken of the Earth, Coats landed the orbiter in California.

MICHAEL COATS

COMMANDER MICHAEL Coats looks up from his work at the commander's station on Discovery's forward flight deck. While in the commander's seat, Coats updates the STS-29 crew activity plan.

Commander Coats flew his third and final Discovery flight, STS-39, in 1991 on an unclassified Department of Defense mission. He and his crew deployed, operated and retrieved the SPAS-II spacecraft and performed research of both natural and induced phenomena in the Earth's atmosphere.

Coats left NASA to pursue opportunities in the private aerospace sector, holding management positions at Loral Space Information Systems and Lockheed Martin Space Systems Company, where he most recently was vice president of Advance Space Transportation. In November 2005, Coats was named director of Johnson Space Center.

STS-39 CREW members pose on the middeck of Discovery. In front (at the bottom of the frame) is Charles Veach. In the middle (from left) are Donald McMonagle, Commander Michael Coats and Gregory Harbaugh. In the back (from left) are Guion Bluford Jr., Blaine Hammond and Richard Hieb.

come Coats, Hawley and Hoffman

Dr. Steven Hawley

An astronomer selected among the first group of shuttle astronauts, Dr. Steven A. Hawley has logged a total of 770 hours and 27 minutes on five space shuttle flights. He flew his first mission with fellow 2007 inductee Michael Coats aboard STS-41D.

Hawley and his crewmates were dubbed the "Icebusters" after they successfully knocked ice free from the side of the orbiter using the robotic arm. Hawley next flew as mission specialist aboard STS-61C, a six-day mission in January 1986 that involved deploying a SATCOM KU satellite.

Hawley conducted the first quantitative observations of the shuttle's "glow" upon entry into Earth's atmosphere, and was responsible for operating a small UV telescope in the cargo bay that the crew used to make observations of galactica gas clouds. On STS-31, Hawley and his crewmates deployed the Hubble Space Telescope from Discovery's payload bay.

Hawley returned to the Hubble seven years later during STS-82 aboard Discovery to perform upgrades to the telescope and install new equipment. He operated the shuttle's 50-foot robotic arm to retrieve and redeploy the Hubble during that 10-day mission.

Hawley's final flight focused on the Chandra X-ray Observatory, which he and his STS-93 crew members deployed in July 1999. He also led the use of a small, UV-sensitive telescope to make broadband ultraviolet observations of a variety of solar system objects.

The former deputy chief of the Astronaut Office and director of Flight Crew Operations, Hawley is now the director of Astromaterials Research and Exploration Science at Johnson Space Center.

STS-93 MISSION Specialist Steven Hawley (second from right) is checked out by White Room closeout crew members before entering the orbiter Columbia.

STS-93 MISSION Specialist Steven Hawley steps down from a T-38 jet aircraft after landing at the Shuttle Landing Facility.

Dr. Jeffrey Hoffman

Dr. Jeffrey A. Hoffman was the first astronaut to log 1,000 hours aboard the space shuttle, with a career total of more than 1,200 hours in space. On STS-51D, Hoffman made the shuttle program's first unscheduled spacewalk in April 1985, attaching a makeshift "flyswatter" to the end of Discovery's robotic arm.

The unplanned extravehicular activity was performed as part of an effort by the crew to engage a malfunctioning satellite deployed earlier in the seven-day mission. Hoffman's second mission, STS-35, was the first shuttle flight dedicated to astronomical research, flying the ASTRO-1 ultraviolet astronomy laboratory.

Next, Hoffman was named payload commander and mission specialist on STS-46. The crew deployed the European Retrievable Carrier free-flyer and conducted the first test flight of the Tethered Satellite System.

Hoffman flew again with the system in 1996 aboard STS-75. He was also a

DR. JEFFREY HOFFMAN

member of the first Hubble Space Telescope servicing mission, STS-61, in 1993.

During that flight, he performed three spacewalks to replace and install instruments inside the observatory, which in part corrected an optical flaw that had limited the Hubble's on-orbit use. After leaving the astronaut corps in 1997, Hoffman became NASA's European representative in Paris, where he was the liaison between the U.S. space agency and its European partners.

In 2001, he was transferred by NASA to the Massachusetts Institute of Technology, where he is a professor of aerospace engineering in the Department of Aeronautics and Astronautics.

STS-35 MISSION Specialist Jeffrey Hoffman changes a roll of film in a 70mm Rolleiflex camera while on the aft flight deck of Columbia.

NASA Law Enforcement Training Academy receives accreditation

By Linda Herridge
Staff Writer

NASA's Federal Law Enforcement Training Academy at Kennedy Space Center recently received its public safety training academy accreditation from the Commission on Accreditation for Law Enforcement Agencies during a conference in Greensboro, N.C. NASA's training academy at KSC is only the second to achieve this status in the state of Florida; nationwide, it is the 15th.

Operating since 1989 and staffed by 16 Space Gateway Support security officers, the academy provides curriculum development and training classes to all armed NASA and contractor personnel across the agency.

"Achieving this accreditation while maintaining an already intense training schedule demonstrates the dedication of our training staff," said training academy program manager Ron Storey, a NASA special agent in spaceport operations.

The commission, also known as CALEA, views the standards as reflecting the best professional requirements and practices for a public safety training academy agency.

Storey said the process to achieve accreditation began in 2004 with a two-year, self-assessment phase. In 2006, two specialized assessors familiar with the CALEA process arrived at KSC to review the training academy's processes and compliance with national law enforcement training academy standards.

STANDING IN front of the NASA Federal Law Enforcement Training Academy at Kennedy Space Center, from left, are Ron Storey, NASA special agent; Jeff King, Rick Lanoue, Bobby Drinkwater, Richard Kelly, Keith Fields, John Stubbe, Ray Boyd, Tim Suspanic and Mike Scott, Space Gateway Support federal law enforcement trainers; Rex Wilson, Doc Willoughby, Keith Costa, Bonnie Ekey and J.J. Curtis; Tom Flaherty, assessor for the Commission on Accreditation for Law Enforcement Agencies; and David Hobson, CALEA assessor team leader.

In January, CALEA accreditation assessors arrived at the center to interview the training staff, comprised of SGS law enforcement training instructors. They reviewed paperwork, toured training facilities, observed training in progress and reviewed KSC's processes based on 182 CALEA standards.

These standards cover nine chapters or topic areas including certification, organization, direction and authority, human resources, recruitment and selection, instructional systems, program development, training support and student welfare.

Lt. J.J. Curtis is an instructor at the academy and served as the SGS accreditation manager responsible for processing and developing the standards to meet CALEA requirements.

"This process gave me a new perspective of the working relationship between the various SGS directorates, as well as the relationship we have with our NASA customer," Curtis said. "The ability to achieve accreditation from CALEA was a true testament to the professionalism of all those I work with at the NASA Federal Law Enforcement Training Academy."

Rex Wilson, assistant chief of SGS security training, said his company's management staff made achieving CALEA accreditation an organizational priority. "I thank the NASA Protective Services office for their vision in recognizing the enhanced professionalism this achievement will bring to the academy," Wilson said.

Nominations sought for 2007 NASA Software of the Year Award

A call for nominations has begun for the 14th-annual NASA Software of the Year Award, which recognizes developers of exceptional software created for and owned by NASA that is creative, usable, transferable and possesses inherent quality.

The award includes the NASA Software Medal, a certificate signed by the NASA administrator and a cash award for up to $100,000. In order to be eligible, the software must meet the following requirements:

- Must have been released by the project within the last three years. The software may only be considered officially released after all experimental phases have been successfully completed to the satisfaction of the customer.
- Must have received the Invention and Contributions Board initial software release award for the contribution prior to April 13 of this year.
- Must have a current technology readiness level of seven or higher.
- NASA must have an intellectual property interest.
- Must have been supported, adopted or used by NASA.
- Must have made a significant scientific or technical contribution to the NASA mission.

In addition, all software must be in compliance with NASA security procedures per NASA Policy Directive 2810, NASA Information Security Policy.

Those who feel they have software that meets the above requirements should contact Carol Dunn, NASA Innovative Partnerships Program Office, at 867-6381, for information on how to apply for this prestigious award. Nominees must have paperwork completed by April 6.

Remembering Our Heritage

40 years ago: Surveyor-3 mission maps lunar surface

By Kay Grinter
Media Reference Librarian

Following a successful countdown, Surveyor-3 launched at 2:05 a.m. EST on April 17, 1967, aboard an Atlas-Centaur rocket from Launch Complex 36B on Cape Canaveral.

The Surveyor Program, an important precursor to the Apollo landings, was the first assignment for the General Dynamics-built rocket. Surveyor-3 was the seventh successful launch for the Atlas-Centaur combination.

NASA alumnus Bill Huseonica joined the Centaur team in 1963 at Lewis Research Center (now Glenn Research Center) in Cleveland. The decision to use the Centaur for the Surveyor missions intrigued him, and he transferred to Kennedy to be close to the Centaur action as a systems engineer in the Launch Operations Division.

Now retired and living in McAlpin, Fla., he and his wife are exploring the western United States from their motor home.

"The time I was a member of the Atlas/Centaur team was the most exciting time of my career." Huseonica recalled by phone during a stop in Arizona. "I was very proud to be a part of the launch team, with Bob Gray and John Neilon leading us,"

The Hughes-built spacecraft was the second in the Surveyor series to land softly on the lunar surface. High reflective rocks apparently confused the spacecraft's descent radar, causing the vernier engines to continue firing during landing and the spacecraft to bounce twice.

Even so, the spacecraft settled in an upright position and the initial images were received within an hour after landing.

Two days later, the program's first surface sampler, a scoop mounted on a flexible motor-driven arm, was put to work pressing, digging, trenching, picking up and redepositing lunar material in view of a television camera. Some 6,300 images were transmitted before the spacecraft was shut down for lunar night on May 3.

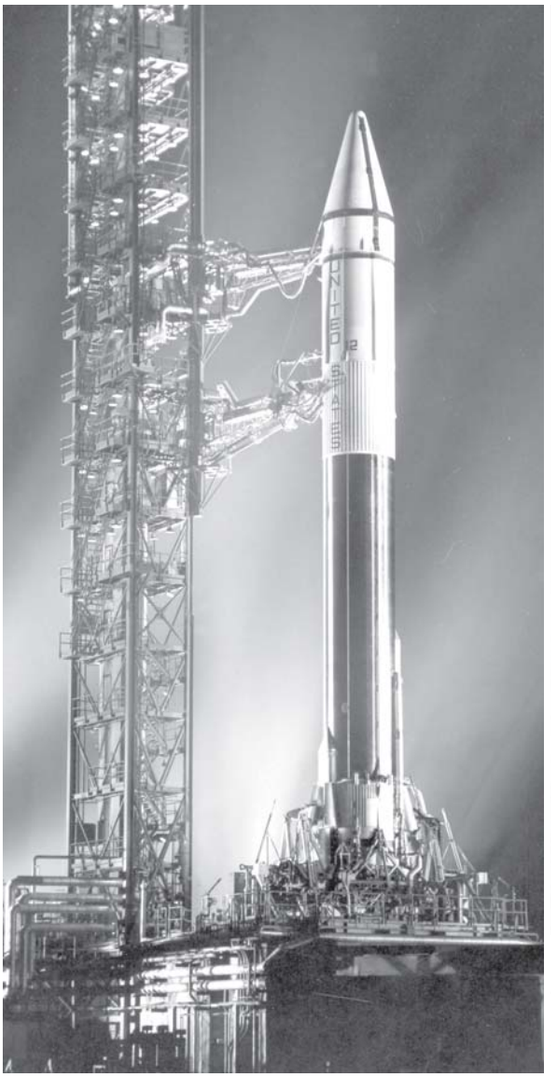
The spacecraft failed to come back to life when the command was sent two weeks later.

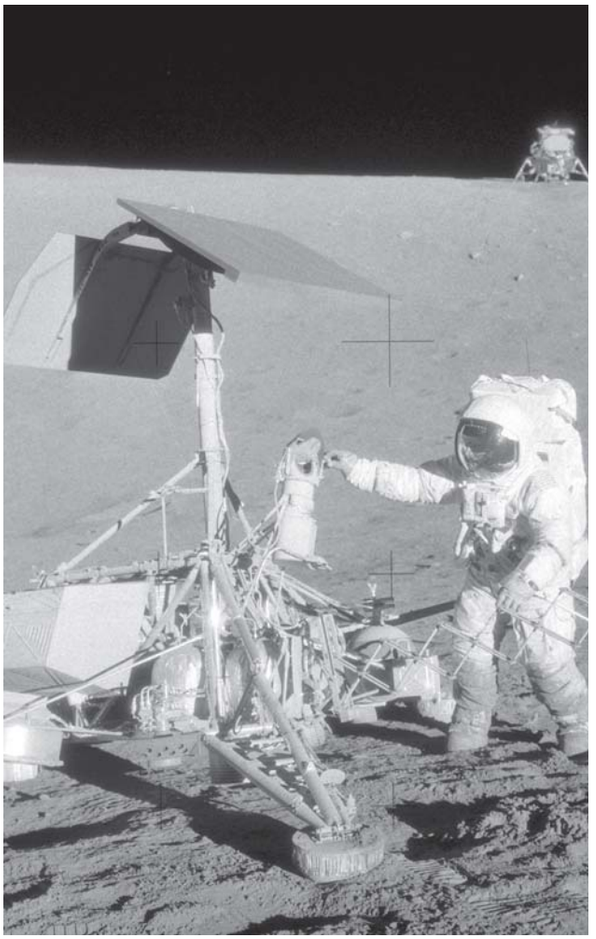
The launch team members were not the last to touch this hard-working spacecraft, however. On Nov. 20, 1969, during their second spacewalk, Apollo 12 astronauts Pete Conrad and Alan Bean visited the spacecraft, resting about 600 feet from their lunar module.

They removed about 22 pounds of hardware from the spacecraft, including the TV camera, for examination back on Earth.

John Neilon recalled, "Some of us had to forego the post-launch party for Surveyor-3 to get on a plane for California to support the ESSA-5 launch."

The launch of the Environmental Science Services Administration's meteorological satellite aboard a Delta rocket took place three days later at Vandenberg Air Force Base. ESSA-5 was the eighth launch for the team in 1967, and it was only April.





SURVEYOR-3 LAUNCHED on April 17, 1967, aboard an Atlas-Centaur rocket (left). During Apollo 12, Pete Conrad helped remove 22 pounds of hardware from the spacecraft, including the television camera.

Biannual Diversity Event is April 9

The 2007 KSC Biannual Diversity Event with guest speaker George Takei will be held in the KSC Training Auditorium at 11:30 a.m. April 9. Takei is best known for his portrayal of Mr. Sulu in the acclaimed television and film series "Star Trek." Takei is currently playing the father of time traveler Hiro Nakamura on the NBC TV series "Heroes." Seating allocations for this presentation will be provided to directorates and contractors.

KSC Toastmasters place second in speech contests

Kennedy Space Center Toastmasters Dwayne Johnson and Bridgett Mack recently placed second in the Area 11 International Speech and Table Topics Contest in Port St. John. Representing KSC Toastmasters Club 3695, the two employees will be alternates for the area-wide event, which will be held April 14 in Orlando.

Johnson's speech was an impromptu response to the question, "Why can't I?" Mack's speech was titled, "The Wild Cat in the Room."

Johnson is an electrical avionics systems engineer who joined Toastmasters to become comfortable at giving presentations and to develop leadership skills.

Mack is a NASA budget analyst who joined the group to get over her fear of public speaking and to open up more easily to others.

"I've come to the realization that the fear will always be there and I just need to use it to my advantage," she said.

BRIDGETT MACK, a NASA budget analyst, and Dwayne Johnson, an electrical avionics engineer, recently placed second in the Area 11 International Speech and Table Topics Contest.

Toastmasters International is the world's largest nonprofit educational organization devoted to communication and leadership development.

Toastmasters offer a "learn by doing" educational program in which members hone their skills in a comfortable and supportive club atmosphere.

After joining a Toastmasters club, members progress through a series of 10 speaking assignments designed to instill a basic foundation in public speaking. Each assignment is geared toward a specific speaking skill and is designed to enable members to improve their public speaking skills.

Members who complete the basic manual receive a "competent communicator" certification from Toastmasters International.

There is no instructor. Members evaluate each other's presentations, an integral component of the educational program. Evaluations are structured to include comments about skills that the speaker demonstrates well and to provide suggestions about opportunities for improvement.

Toastmasters also give impromptu talks about assigned topics, usually related to current events. They develop listening skills, conduct meetings and learn parliamentary procedure.

KSC Toastmasters meet every Wednesday from 11:30 a.m. to 12:30 p.m. in Headquarters Building room 2254. For more information, visit **http://ksc.freetoasthost.info**.

The LC-39 Toastmasters meet in the Orbiter Support Building 1 room 3303B on Wednesdays at 11:30 a.m. For information, visit **http://lc39.freetoasthost.net**.

Florida Space Academy prepares students for exploration careers

The Florida Space Academy is a university-based undergraduate program for university and college students to prepare for a future in a space-related field. During the various programs, the students work on a range of hands-on, interdisciplinary projects designed to help students become problem solvers and experience real space- and science-based problems.

In addition, the students are introduced to the space program through informative tours and meetings with KSC employers and informed personnel who will inspire these young men and women to seek ways to play a part in Florida's space future.

The academy also exists to encourage students to continue their education in science-based programs at universities through continuing studies, internships, science-based research programs, and other opportunities and cooperation initiatives between Space Florida and the NASA Florida Space Grant Consortium.

UNDERGRADUATE STUDENTS can learn space-related careers at the Florida Space Academy. Application forms are due April 20.

The academy is free to all accepted undergraduate students enrolled in a Florida university or community college. The upcoming Space Academy Program includes the following sessions:

- April 30 to May 4
- May 7 to 11
- June 11 to 22
- Aug. 6 to 18

Interested students should mail or fax (321-730-5307) a completed application form to Tony Gannon by April 20. For information, contact Gannon at 321-730-5301, ext 230.

John F. Kennedy Space Center

Spaceport News

Spaceport News is an official publication of the Kennedy Space Center and is published on alternate Fridays by External Relations in the interest of KSC civil service and contractor employees.

Contributions are welcome and should be submitted two weeks before publication to the Media Services Branch, IDI-011. E-mail submissions can be sent to *Jeffery.Stuckey-1@ksc.nasa.gov.*

Managing editor. . . . . Amber Philman
Editor. . . . . .Jeff Stuckey
Copy editor . . . . . .Corey Schubert

Editorial support provided by InDyne, Inc. Writers Group.
NASA at KSC is located on the Internet at http://www.nasa.gov/centers/kennedy
USGPO: 733-049/600130